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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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John Albert Toebes

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EXAMINER

PARK, JUNG H

ART UNIT

PAPER NUMBER

2616

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/061,553	TOEBES ET AL.	
	Examiner	Art Unit	
	Jung Park	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remark

1. Applicant's request for reconsideration of the rejection of claims 1-32 and consideration of claims 33-38 which were not addressed in the last final Office Action is persuasive and, therefore, the finality of that action is withdrawn because claims 33-38 were inadvertently left out. The Amendment of 7/28/06 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 11, 16, 21, 26, 31, and 33-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Gervais et al. (U.S. 5,856,974, "Gervais").

Regarding claims 1, 11, 21, and 31, Gervais discloses, "In a data communication network, a method for operating a client node, the method comprising:

- formatting an IP packet (*IP header 400 & data fig.4*) to include a header (*IPX header 400 fig.4*) comprising a globally significant IP address (*4 bytes of network address 406 fig.4*) identifying a realm (*col.4, ln.50-54 where ...domain network address*) and a locally significant IP address (*6 bytes of node address 410 as a destination address 402 fig.4*) identifying a destination of the IP packet within the realm (*col.4, ln.50-54 where ...a gateway-mapped node address within the domain*); and
- transmitting the IP packet (*col.4, ln.60-65 where ...a packet is received*)."

Regarding claims 6, 16, and 26, Gervais teaches, "the globally significant IP address belongs to a range specified for realms (*col.4, ln.50-54 where ...domain network address*)."

Regarding claim 33, Gervais further discloses, "the client node comprises a globally unique IP address (346 fig.3; col.7, ln.32-42 where network layer address (net:id) comprises a pair of (network address: node address), which is a globally unique IP address in a network, for example, 25:X for 342 fig.3)."

Regarding claim 34, Gervais further discloses, "the globally unique IP address comprises a concatenation of a globally significant IP address of the client node's realm (col.7, ln.32-42; col.7, ln.11-22 where network address, net=25 for 342 fig.3) and the client's node locally unique address (node address, id=X for 342 fig.3)."

Regarding claim 35, Gervais further discloses, "the header comprises an encapsulation IP header (network numbers 406 & 408 fig.4) and an inner IP header (node addresses 410 & 412 fig.4)."

Regarding claim 36, Gervais further discloses that the encapsulation IP header comprises the globally significant IP address identifying the realm (destination network number 406 fig.4) and a globally significant IP address identifying a realm of the client node (source network number 408 fig.4)."

Regarding claim 37, Gervais further discloses, "the inner IP header comprises the locally significant IP address identifying the destination of the IP packet (destination address 410 fig.4) and a locally significant IP address identifying the client node (source address 412 fig.4)."

Regarding claim 38, Gervais further discloses, "transmitting the IP packet comprises utilizing only the globally significant IP address in selecting a next hop node (col.7, ln.52-58 where ...domain network number)."

4. Claims 7-9, 17-19, 27-29, and 32 are rejected under 35 U.S.C. 102(e) as being anticipated by Luciani et al. (U.S. 6,418,476, "Luciani").

Regarding claims 7, 17, 27, and 32, Luciani discloses, "a method of operating a gateway node to handle a received packet, the method comprising:

- extracting a globally significant destination address from a destination address field of the packet (*col.3, ln.14-18 where ...receiving and reading the globally unique destination IP address is equivalent to extracting a globally significant destination address from the field*); and
- if the globally significant destination address identifies a realm directly attached to the gateway node (*a border router*), extracting a locally significant destination address from the packet (*a local IP address*), placing the locally significant destination address field (*translating*), and forwarding the packet to a local destination within the realm (*forwarding the IP packet to a host in the domain B*)."

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Regarding claims 8, 18, and 28, Gervais discloses, "if the globally significant destination address does not identify a realm directly attached to the gateway node, forwarding the packet to a next hop based on the globally significant address (col.3, ln.1-18 ...a next hop router...)." .

Regarding claims 9, 19, and 29, Gervais discloses, "advertising a realm reachable through the gateway node (col.5, ln.36-43)."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-4, 12-14, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gervais in view of Rune (U.S. 6,304,913, "Rune").

Regarding claims 2, 12, and 22, Gervais is silent on the method of resolving the globally significant IP address and resolving the locally significant IP address for their names. However, Rune discloses, "resolving the globally significant IP address from a first component of a globally significant name (col.1, ln.63-col.2, ln.6 where getting a global IP address from DNS); and resolving the locally significant IP address from a second component of a locally significant name (col.1, ln.63-col.2, ln.6 where getting a local IP address from DNS)." Rune teaches that it is old and well known in the computer network art to convert an IP name into an IP address by use of Domain Name Server (DNS).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the domain name system taught by Rune into the system of Gervais since one would be motivated to convert Internet names to actual IP addresses in order to resolve the globally significant IP address from a globally significant name and also resolve the locally significant IP address from a locally significant name.

Regarding claims 3, 13, and 23, Gervais lacks what Rune discloses, "resolving the globally significant IP address comprises contacting a global DNS server (156c fig.1B)." This claim is rejected for the same reasons and motivation set forth in the rejection of claim 2.

Regarding claims 4, 14, and 24, Gervais lacks what Rune discloses, "resolving the globally significant IP address comprises contacting a local DNS server (156e fig.1B)." This claim is rejected for the same reasons and motivation set forth in the rejection of claim 2.

7. Claims 5, 15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gervais in view of Rune and further in view of MeLampy et al. (US Pub. 2002/0169887, "MeLampy");

Regarding claims 5, 15, and 25, Gervais and Rune lack what MeLampy teaches, "resolving the globally significant IP address comprises contacting an SIP server (122, 124, 126 & 128 fig.1; para.[0065])."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the SIP server taught by MeLampy into the system disclosed by Gervais and Rune since one would be motivated to include the SIP server in order to setting up sessions between one or more VoIP clients.

8. Claims 10, 20, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani in view of MeLampy.

Regarding claims 10, 20, and 30, although Luciani teaches an interior gateway protocol message identifying networks reachable through the gateway node (col.2, ln.3-9), Luciani is silent on the border gateway protocol message. However, MeLampy teaches the border gateway protocol for other realms (para.[0055] ...BGP-4 routers...)." .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the BGP router disclosed by MeLampy with the system of Luciani since one would be motivated to include the BGP router in a realm (AS: autonomous system) in order to route packets to other realms.

Response to Arguments

9. Applicant's arguments filed on April 17, 2006 with respect to the amended claims 1-6, 11-16, 21-26, and 31 have been considered but are moot in view of the new ground(s) of rejection.
10. Applicant's arguments filed on April 17, 2006 with respect to claims 7-10, 17-20, 27-30, and 32 have been fully considered but they are not persuasive.

At page 10, for claim 7, applicant argues, "there is no disclosure in Luciani of extracting globally significant destination address from a destination field of a packet received at a border router." In reply, Luciani teaches (fig.1; col.3, ln.14-18) that the router 150 receives IP datagram from a first host 111 and reads the globally unique destination IP address from the datagram in order to translate the globally unique IP address with the local IP address assigned to the second host 121 for forwarding to the host. That is, the reading IP address is equivalent to extracting a globally significant destination address from the field in order to translate into the local IP address assigned for the second host.

11. Applicant's arguments filed on July 28, 2006 have been fully considered, but they are not persuasive.

Claim Rejections under §102:

At pages 9-10, for claim 1, applicant argues, "Gervais does not disclose formatting an IP packet to include a globally significant IP address identifying a realm and a locally significant IP address identifying a destination of the packet within the realm."

In reply, Gervais discloses a formatted IP packet comprising network source/destination addresses 406 & 408 fig.4 (which is equivalent to "a globally significant IP address identifying a realm") and node address 410 & 412 fig.4 (which is equivalent to "a locally significant IP address identifying a destination of the packet within the realm"). See details in column 4, line 50-65. Accordingly, claims 1, 6, 11, 16, 21, 26, and 31 are anticipated by Gervais.

Further, claims 33-38, depending either directly or indirectly from claim 1, are also anticipated for the same reasons discussed above with respect to claim 1.

At page 10, for claim 7, applicant argues, "there is no disclosure in Luciani of extracting a globally significant destination address from a destination address field of a packet received at a border router and placing the locally significant destination address in the destination address field."

In reply, Luciani teaches (fig.1; col.3, ln.14-18) that the router 150 receives IP datagram from a first host 111 and reads the globally unique destination IP address from the datagram in order to translate the globally unique IP address with the local IP address assigned to the second host 121 for forwarding to the host by placing the assigned local IP address in the local IP address field of the packet. That is, the reading IP address is equivalent to extracting a globally significant destination address from the field in order to translate into the local IP address assigned to the second host.

Further, applicant argues, "Lucian does not read a locally significant destination address from a packet."

In reply, for forwarding a packet to a host by placing a locally significant destination address into the local address field of the packet, it is required to read the local IP address to know the bit location of this field in the packet. Accordingly, claims 7, 17, 27, and 32 are anticipated by Luciani.

Claim Rejections under §103:

At page 11, for claim 2, applicant argues, "neither Gervais nor Rune show or suggest resolving a globally significant IP address from a first component of a globally

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significant name and resolving a locally significant IP address from a second component of a locally significant name."

In reply, Rune discloses a Domain Name System (DNS) server in col.1, ln.63-col.2, ln.6. DNS server is for converting host names and domain names into IP addresses on the Internet or on local networks that use the TCP/IP protocol. For example, when a Web site address is given to the DNS either by typing a URL in a browser or behind the scenes from one application to another, DNS servers return the IP address of the server associated with that name. where getting a global IP address from DNS.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include the domain name system taught by Rune into the system of Gervais since one would be motivated to convert Internet names to actual IP addresses in order to resolve the globally significant IP address from a globally significant name and also resolve the locally significant IP address from a locally significant name. Accordingly, claims 2-4, 12-14, and 22-24 are unpatentable over Gervais and Rune.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung Park whose telephone number is 571-272-8565. The examiner can normally be reached on Mon-Fri during 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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